# Comments on the Proposed Metals TMDL for the Los Angeles River Watershed

A presentation to the Water Policy Task Force, Southern California Association of Governments

By
Richard A. Watson, A.I.C.P.,
Consultant to Coalition for Practical Regulation

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#### Introduction

- Municipalities agree that water quality impairments due to metals need to be addressed
- Have many concerns with both the TMDL and the Implementation Plan
  - Improper waste load allocations
  - Absence of load allocations
  - BMP sizing
  - Adequacy of the science
  - Compliance with CEQA
  - Legal issues

## Improper Waste Load Allocations

- The stated goal is "to develop pollutant allocations for metals and an implementation plan to meet the water quality objectives in the Los Angeles River and listed tributaries."
- Table 31 presents dry weather allocations for cadmium, copper, lead, and zinc for six reaches of the LA River and seven tributaries.
- Only 13 of the 52 allocations are waterbody/pollutant combinations listed as impairments in the 2002 303(d) list.
- The remaining 39 allocations should not be made. They are functionally numeric water quality objectives and TMDL numeric targets for waterbody/constituent combinations that are not listed as impaired.

#### Improper Waste Load Allocations

Table 31. Remaining dry-weather loading capacity for total metals for the Los Angeles River and listed tributaries (kg/day) to be allocated among stormwater and other permittees.

Los Angeles River	Critical Flow	Cadmium	Copper	Lead	Zinc
LA River Reach 6	7.27	0.11	0.52	0.20	6.74
LA River Reach 5	0.75	0.01	0.05	0.02	0.70
LA River Reach 4	5.18	0.05	0.24	0.08	3.20
LA River Reach 3	4.90	0.06	0.26	0:09	3.08
LA River Reach 2	3.90	0.04	0.20	0.07	2.18
LA River Reach I	2.61	0.13	0.14	0.05	1.45
Tributaries	Critical Flow	Cadmium	Copper	Lead	Zinc
Bell Creek	0.55	10.0	0.04	0.01	0.51
Tujunga Wash	0.15	<0.01	0.01	<0.01	0.09
Verdugo Wash	3.34	0.03	0.15	0.05	1.70
Burbank Western Channel	3.30	0.04	0.18	0.06	1.93
Arroyo Seco	0.58	0.01	0.03	0.01	0.33
Rio Hondo	0.50	<0.01	0.01	< 0.01	0.16
Compton Creek	0.90	0.01	0.04	0.01	0.51

Waterbody segment/chemical constituant combination Not on 2002 303(d) list

Waterbody segment/chemical constituant combination on 2002 303(d) list

## Nonpoint Sources Must Be Given Load Allocations

- The staff report acknowledges that atmospheric deposition is a potential source of metals in the watershed that may contribute several thousand kilograms per year.
- The staff report inappropriately focuses on direct deposition in order to avoid assigning a load allocation to atmospheric deposition.
- The staff report makes conclusionary statements about the significance of contributions from national forests and open space in order to avoid assigning a load allocation to them.

#### Atmospheric Deposition Must Be Given a Load Allocation

- EPA notes in a handbook regarding aerial deposition, "Atmospheric deposition is now recognized in many areas as a significant cause of water quality problems.."
- EPA also notes that "if a significant portion of the total pollutant load is from aerial sources that are not accounted for in the TMDL, efforts at pollutant reduction in the waterbody may not produce the desired water quality improvements."
- "A major challenge of any management strategy that includes atmospheric deposition is figuring out how to achieve the load reductions in air sources necessary to meet water quality standards." EPA Handbook

#### Dominance of Indirect Deposition

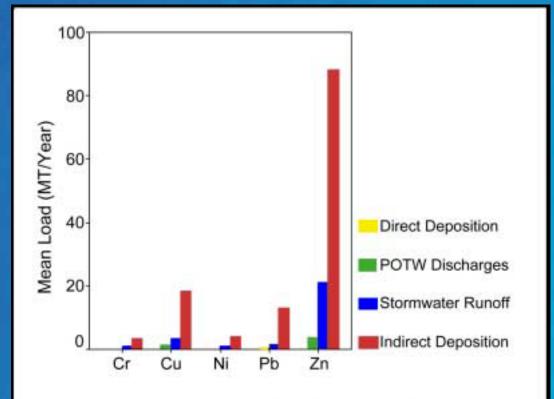


Figure 3. Comparison between mean loadings of trace metals to the Los Angeles River from four potential sources: direct deposition to the water surface, POTW discharges, stormwater runoff, and dry atmospheric deposition to the land surface of the watershed (indirect deposition).

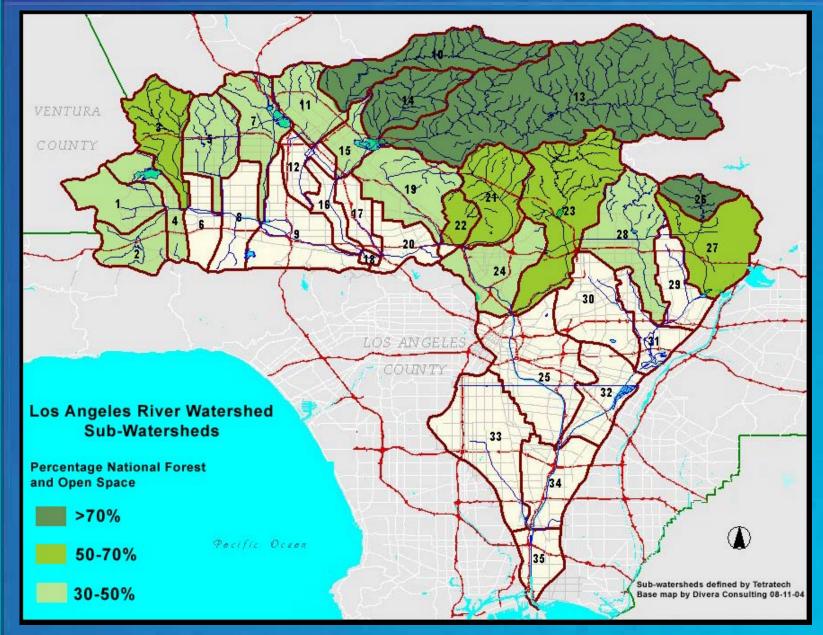
Source: Sabin, Schiff, Lim, Stolzenbach Atmospheric Dry Deposition of Trace Metals in the Los Angeles, 5-3-2004

#### Atmospheric Deposition Must Be Civen a Load Allocation (Continued)

- Unless the major source of pollutants is addressed, it is unlikely that the procedures described in the Implementation section of the TMDL will result in water quality standards being met.
- Controlling atmospheric deposition is not only a reasonable alternative consistent with the requirement of CCR Title 23 Section 3777(a), it should be the preferred alternative for the functional equivalent document.

## National Forest, State Parks and Open Space Must Be Assigned a Load Allocation

- The draft TMDL specifies the focus should be on developed areas, but over 44% of the watershed is forest and open space that also receives loading from atmospheric deposition that is washed off in large storm events.
- Roads and off-road vehicular activity in the National Forest and open areas of the Santa Monica Mountains contribute to localized hot spots for metal deposition.
- It is essential to assign a load allocation to these areas if the TMDL is going to properly address impairments due to cadmium, copper, lead, and zinc.



#### BMP Sizing Deficiencies

- Attachment A to Resolution No. 2004-xxx states that "high magnitude storms represent the critical condition" and that "load duration curves demonstrate that exceedances occur most frequently during large storms (i.e., in excess of 0.5 inches)."
- It appears necessary to treat the 0.5" to 1.5" storm that, on average, occurs on seven of the 32 rain days per year.
- It might also be necessary to treat the 1.5" to 2.25" storm, which occurs three days per year on average.
- The cost analysis in the staff report was based on a 0.5" storm that likely would be insufficient to achieve compliance with the TMDL.

#### Conclusion

- Atmospheric deposition is the major source of metals
- TMDL must have load allocations
- Inappropriate waste load allocations must be deleted
- TMDL needs a high flow exemption to be workable
- Implementation Plan needs to stress source control
- A realistic cost assessment is needed
- Creativity and collaboration are essential
- Someone needs to get the air and water regulators together